

Electronic supplementary information (ESI) Data Table 1: Representative analytical precisions of Pb isotope ratios obtained by using 200FsLA-MFC-ICPMS with 10¹³ Ω resistor Faraday amplifiers

RUN	LA settings	LA repetition (Hz)	Sample ID#	Pb conc. (ppm)	²⁰⁸ Pb (V)	²⁰⁸ Pb/ ²⁰⁶ Pb (ratio)	²⁰⁷ Pb/ ²⁰⁶ Pb (ratio)	Damping factor corrected	2SE	2SE%	²⁰⁷ Pb/ ²⁰⁶ Pb (ratio)	Damping factor corrected	2SE	2SE%	²⁰⁸ Pb/ ²⁰⁶ Pb (ratio)	2SE	2SE%	²⁰⁷ Pb/ ²⁰⁶ Pb (ratio)	2SE	2SE%
Run1	200nm/30um/27S/9(13).10(13).7(12)	25	NIST610_1	-	0.60460	2.183	0.914	2.1891	0.0095	0.43	0.9131	0.0020	0.22	-	-	-	-	-	-	-
Run2	200nm/30um/27S/9(13).10(13).7(12)	20	NIST610_2	-	0.50007	2.180	0.913	2.1883	0.0070	0.32	0.9126	0.0018	0.19	-	-	-	-	-	-	-
Run3	200nm/30um/27S/9(13).10(13).7(12)	15	NIST610_3	-	0.38027	2.187	0.913	2.1906	0.0063	0.29	0.9121	0.0016	0.17	-	-	-	-	-	-	-
Run4	200nm/30um/27S/9(13).10(13).7(12)	10	NIST610_4	-	0.25325	2.193	0.913	2.1886	0.0036	0.16	0.9120	0.0012	0.13	-	-	-	-	-	-	-
Run5	200nm/30um/27S/9(13).10(13).7(12)	5	NIST610_5	-	0.12616	2.185	0.913	2.1880	0.0049	0.23	0.9123	0.0015	0.16	-	-	-	-	-	-	-
Run6	200nm/30um/27S/9(13).10(13).7(12)	2	NIST610_6	-	0.04830	2.190	0.912	2.1880	0.0045	0.21	0.9121	0.0011	0.12	-	-	-	-	-	-	-
Run7	200nm/30um/27S/9(13).10(13).7(12)	1	NIST610_7	-	0.02659	2.196	0.913	2.1903	0.0071	0.32	0.9126	0.0019	0.21	-	-	-	-	-	-	-
Run8	200nm/30um/27S/9(13).10(13).8(13)	10	NIST610_8	-	0.27700	2.190	0.913	2.1884	0.0013	0.06	0.9121	0.0013	0.15	-	-	-	-	-	-	-
Run9	200nm/30um/27S/9(13).10(13).8(13)	15	NIST610_9	-	0.40868	2.188	0.913	2.1874	0.0013	0.06	0.9124	0.0014	0.15	-	-	-	-	-	-	-
Run10	200nm/30um/27S/9(13).10(13).8(13)	10	NIST610_10	-	0.27891	2.189	0.913	2.1892	0.0020	0.09	0.9123	0.0014	0.16	-	-	-	-	-	-	-
Run11	200nm/30um/27S/9(13).10(13).8(13)	5	NIST610_11	-	0.13647	2.191	0.913	2.1901	0.0017	0.08	0.9121	0.0014	0.15	-	-	-	-	-	-	-
Run12	200nm/30um/27S/9(13).10(13).8(13)	2	NIST610_12	-	0.05283	2.189	0.913	2.1902	0.0018	0.08	0.9123	0.0014	0.15	-	-	-	-	-	-	-
Run13	200nm/30um/27S/9(13).10(13).8(13)	1	NIST610_13	-	0.02639	2.192	0.913	2.1905	0.0024	0.11	0.9120	0.0023	0.25	-	-	-	-	-	-	-
Run14	200nm/30um/27S/9(13).10(13).8(13)	25	NIST612_1	-	0.05548	2.183	0.912	2.1848	0.0016	0.07	0.9118	0.0016	0.18	-	-	-	-	-	-	-
Run15	200nm/30um/27S/9(13).10(13).8(13)	20	NIST612_2	-	0.04535	2.185	0.911	2.1854	0.0013	0.06	0.9112	0.0012	0.13	-	-	-	-	-	-	-
Run16	200nm/30um/27S/9(13).10(13).8(13)	15	NIST612_3	-	0.03394	2.185	0.911	2.1862	0.0019	0.09	0.9107	0.0015	0.16	-	-	-	-	-	-	-
Run17	200nm/30um/27S/9(13).10(13).8(13)	10	NIST612_4	-	0.02249	2.186	0.910	2.1851	0.0024	0.11	0.9095	0.0016	0.18	-	-	-	-	-	-	-
Run18	200nm/30um/27S/9(13).10(13).8(13)	5	NIST612_5	-	0.01096	2.188	0.910	2.1854	0.0027	0.12	0.9100	0.0017	0.19	-	-	-	-	-	-	-
Run19	200nm/30um/27S/9(13).10(13).8(13)	2	NIST612_6	-	0.00417	2.185	0.911	2.1831	0.0070	0.32	0.9104	0.0039	0.42	-	-	-	-	-	-	-
Run20	200nm/30um/27S/9(13).10(13).8(13)	1	NIST612_7	-	0.00220	2.192	0.918	2.1943	0.0113	0.51	0.9171	0.0064	0.70	-	-	-	-	-	-	-
Run21	200nm/30um/27S/9(13).10(13).8(13)	25	BCR-2G-1	-	0.01737	2.082	0.837	2.0855	0.0028	0.13	0.8364	0.0015	0.18	-	-	-	-	-	-	-
Run22	200nm/30um/27S/9(13).10(13).8(13)	20	BCR-2G-2	-	0.01450	2.083	0.837	2.0843	0.0017	0.08	0.8363	0.0018	0.22	-	-	-	-	-	-	-
Run23	200nm/30um/27S/9(13).10(13).8(13)	15	BCR-2G-3	-	0.01127	2.084	0.836	2.0850	0.0023	0.11	0.8349	0.0015	0.17	-	-	-	-	-	-	-
Run24	200nm/30um/27S/9(13).10(13).8(13)	10	BCR-2G-4	-	0.00771	2.088	0.835	2.0862	0.0029	0.14	0.8348	0.0023	0.27	-	-	-	-	-	-	-
Run25	200nm/30um/27S/9(13).10(13).8(13)	5	BCR-2G-5	-	0.00384	2.086	0.838	2.0839	0.0063	0.30	0.8370	0.0026	0.32	-	-	-	-	-	-	-
Run26	200nm/30um/27S/9(13).10(13).8(13)	2	BCR-2G-6	-	0.00152	2.060	0.831	2.0600	0.0149	0.73	0.8325	0.0074	0.89	-	-	-	-	-	-	-
Run27	200nm/30um/27S/9(13).10(13).8(13)	1	BCR-2G-7	-	0.00082	2.083	0.842	2.0866	0.0199	0.95	0.8419	0.0106	1.26	-	-	-	-	-	-	-
Run28	200nm/30um/27S/9(13).10(13).8(13)	25	BHVO-2G-1	-	0.00262	2.072	0.839	2.0693	0.0115	0.55	0.8387	0.0046	0.55	-	-	-	-	-	-	-
Run29	200nm/30um/27S/9(13).10(13).8(13)	20	BHVO-2G-2	-	0.00214	2.069	0.832	2.0642	0.0088	0.43	0.8323	0.0049	0.59	-	-	-	-	-	-	-
Run30	200nm/30um/27S/9(13).10(13).8(13)	15	BHVO-2G-3	-	0.00161	2.063	0.837	2.0595	0.0126	0.61	0.8351	0.0059	0.70	-	-	-	-	-	-	-
Run31	200nm/30um/27S/9(13).10(13).8(13)	10	BHVO-2G-4	-	0.00110	2.072	0.833	2.0655	0.0178	0.86	0.8326	0.0081	0.97	-	-	-	-	-	-	-
Run32	200nm/30um/27S/9(13).10(13).8(13)	8	BHVO-2G-5	-	0.00088	2.081	0.841	2.0769	0.0255	1.23	0.8408	0.0102	1.22	-	-	-	-	-	-	-
Run33	200nm/30um/27S/9(13).10(13).8(13)	6	BHVO-2G-6	-	0.00065	2.076	0.842	2.0911	0.0295	1.41	0.8453	0.0168	1.99	-	-	-	-	-	-	-
Run34	200nm/30um/27S/9(13).10(13).8(13)	5	BHVO-2G-7	-	0.00054	2.054	0.840	2.0479	0.0318	1.55	0.8434	0.0167	1.98	-	-	-	-	-	-	-
Run35	200nm/30um/27S/9(13).10(13).8(13)	4	BHVO-2G-8	-	0.00042	2.120	0.853	2.0961	0.0504	2.40	0.8525	0.0235	2.75	-	-	-	-	-	-	-
Run36	200nm/30um/27S/9(13).10(13).8(13)	3	BHVO-2G-9	-	0.00030	2.117	0.846	2.1169	0.0714	3.37	0.8401	0.0243	2.90	-	-	-	-	-	-	-
Run37	200nm/30um/27S/9(13).10(13).8(13)	2	BHVO-2G-10	-	0.00021	2.174	0.870	2.1764	0.1025	4.71	0.8834	0.0531	6.01	-	-	-	-	-	-	-
Run38	200nm/30um/27S/9(13).10(13).8(13)	1.5	BHVO-2G-12	-	0.00015	2.069	0.818	2.1306	0.1287	6.04	0.8525	0.0773	9.07	-	-	-	-	-	-	-
Run39	200nm/30um/27S/9(13).10(13).8(13)	1	BHVO-2G-11	-	0.00012	2.243	1.010	2.3607	0.3165	13.41	1.0611	0.1305	12.30	-	-	-	-	-	-	-